



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,743	03/19/2004	Paul S. Lin	26874/04013	8272

24024 7590 07/07/2006

CALFEE HALTER & GRISWOLD, LLP
800 SUPERIOR AVENUE
SUITE 1400
CLEVELAND, OH 44114

EXAMINER

KIM, JOHN

ART UNIT PAPER NUMBER

3733

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/804,743

Applicant(s)

LIN, PAUL S.

Examiner

John Kim

Art Unit

3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
4a) Of the above claim(s) 12-18 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-11 and 19-26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/8/06
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Examiner's note

Applicant amends claims 1-2, 5, and 7, cancels 12-18, and adds 19-26.

Claim Objections

Claim 7 is objected to because of the following informalities: it is noted that in the amendment files 5/8/06, applicant amends to remove "apertures" in line 5. However, this would leave the claim without the proper introduction of the limitation of "apertures", thus leaving the other "apertures" lacking antecedent basis. For examining purpose, the examiner will read "said plate defining at least two apertures." Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-10, 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (US Pat 5487741) in view of Warden et al. (US Pat. 5261910).

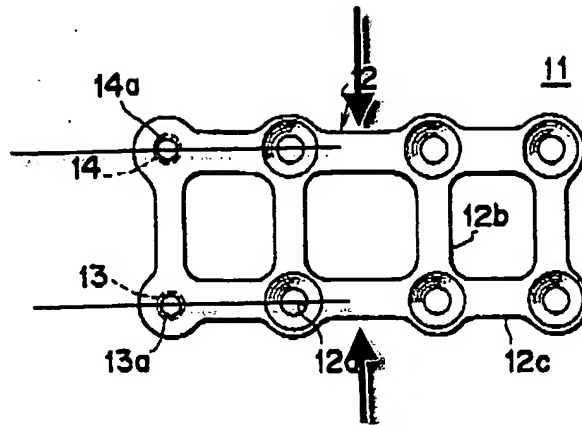
Maruyama discloses a plate with apertures for screws, and is defined along a single axis (as presented in office action dated 2/8/06 and below), a cleat (3, 4), an interior and exterior faces, a central portion with reduced width, a second cleat, a plate with a bowed width. Maruyama discloses the claimed invention except for having a slot

Art Unit: 3733

for the first and second apertures and having specific dimensions of 43 mm and 12 mm. Warden teaches of having a plate with slots (30). This allows the surgeon to place the screws spaced apart from each other on the vertebrae (col 2:2-3). It would have been obvious to one skilled in the art at the time the invention was made to construct the plate of Maruyama with slots as the apertures in view of Warden, in order to prevent the limitation of where the screws would be placed on the vertebrae. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the plate of Maruyama modified by Warden including a length not exceeding 43mm and a width not exceeding 12mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

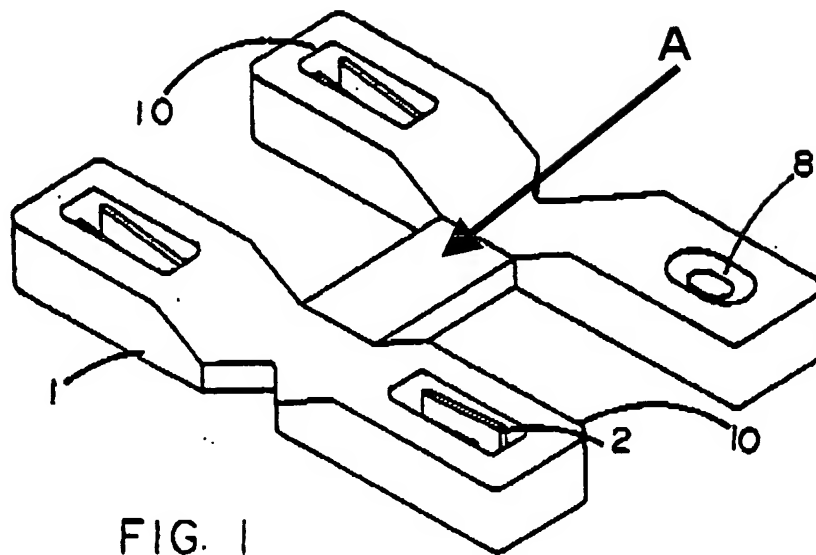
In regards to claims 19-20, Maruyama in view of Warden discloses a plate, but fails to disclose having an axis offset from the central axis of the plate. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct a plate of Maruyama in view of Warden with an axis offset from the central axis of the plate since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person of ordinary skill in the art would find obvious for the purpose placing the plate along the vertebrae. *In re Dailey and Eilers*, 149 USPQ 47 (1966).

FIG. 3



Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (US Pat 5487741) in view of Warden et al. (US Pat. 5261910) as applied to claim 7 above, and further in view of Aust et al. (US Pat. 5180381).

The combination of Maruyama and Warden discloses the claimed invention except for having cancellous screws and a center beam. Aust discloses a plate with cancellous screws (col 3: 7-12) (claim 8) and a centerline beam (A, in modified figure below, and discussed in office action dated 2/8/06) (claim 11). This allows the plate to be firmly attached to the bone (col 2: 51-58) (claim 7 and 8) and improves the structural stability of the plate. It would have been obvious to one skill in the art at the time the invention was made to construct the plate of the combination of Maruyama and Warden with cancellous screws and a centerline beam in view of Aust, in order to prevent the plate from being loosened from the bone and provide structural stability to the plate.



Response to Arguments

Applicant's arguments filed 5/8/06 have been fully considered but they are not persuasive.

Applicant argues that none of the prior art discloses having apertures along a single axis and that one is a slot. It is clearly shown in the modified figure 3 above that the apertures are along a single axis (or look at figure 2, Maruyama). In regards to the slot, Warden clearly shows a slot (30) to allow the surgeon ease of inserting the screw. This argument is found not persuasive.

Applicant argues that none of the prior art discloses having apertures associated with respective vertebrae and again no slot. Please see above regarding the limitation of slot. It is clearly understood that the plate needs to be held by a screw that is attached to the vertebrae, thus the aperture, which the screw enters, must be aligned or spaced with the vertebrae.

Applicant argues that claims 21-26 are patentable over the prior art. As noted above in the rejection, this is not the case. Please see above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is (571) 272-2817. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JK 


CORRINE McDERMOTT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700